Heart 2007;**93**:1619

# Featured Correspondence

# PCI with or without surgical standby

**To the Editor:** We congratulate Dr Carlsson *et al* on their work on the safety of percutaneous coronary interventions (PCI) in an hospital with or without on-site cardiac surgery standby, albeit their study raises several concerns.

First, the majority of patients (nearly 80%) had one- or two-vessel disease and as depicted in table 2 in their paper only around 15% of patients had two or more vessels treated. No fundamental data as to the type of culprit vessels (whether left anterior descending coronary artery or posterior descending coronary artery or a minor diagonal branch) or the baseline ejection fraction were provided in the study.

The data on the deaths after emergent coronary artery bypass grafting (CABG) in the two groups are quite confusing as reported by the authors in last paragraph of the "Results" section; moreover, there is no clear specification about the percentage of patients undergoing emergency CABG with a myocardial infarction in <24 hours. This fundamental factor may yield an almost doubled predicted operative mortality(16% vs 6%) in such a specific group of patients, as previously reported by other authors.2 According to the higher rate of patients with ST-segment elevation myocardial infarction in centres with onsite cardiac surgeons, it is more than likely that these high-risk patients underwent CABG.

Finally, the following statement in the Discussion is questionable: "...The presented data of contemporary practice could not show significant differences with respect to adjusted outcome variables...", since the authors themselves in table 3 and in fig 2 (Kaplan–Meier long-term mortality) depict that their results are non-adjusted.

In conclusion, we believe that the study by Dr Carlsson *et al* does not fairly represent the general clinical situation of all patients undergoing PCI and the conclusions of the manuscript should be used carefully only in a selected subset of patients and not immediately adopted as a reference for the PCI guidelines as the authors suggest.

### Gianluigi Bisleri, Tomaso Bottio, Claudio Muneretto

Division of Cardiac Surgery, University of Brescia Medical School, Brescia, Italy Nicola Berlinghieri

Division of Cardiology, University of Brescia Medical School, Brescia, Italy

Correspondence to: Dr G Bisleri, Cardiochirurgia SSVD – Spedali Civili, P. le Spedali Civili, 1, 25123 Brescia, Italy; gianluigi.bisleri@gmail.com

#### References

- Carlsson J, James SN, Stähle E, et al. Outcome of percutaneous coronary intervention in hospitals with and without on-site cardiac surgery standby. Heart 2007;93:335–8.
- 2 Haan CK, O'Brien S, Edwards FH, et al. Trends in emergency coronary artery bypass grafting after percutaneous coronary intervention, 1994–2003. Ann Thorac Surg 2006;81:1658–65.

**The authors' reply:** We thank Dr Bisleri *et al* for their interest in our study and for their comments. However, we think that their comments are mostly based on misunderstandings.

The most fundamental misconception seems to be that of suspected case selection. Not all data can be shown in an article because of space considerations. Therefore we could not show that the vessel distribution and the segment distribution were not significantly different between the two types of hospitals. There is no geographical variation according to the severity of the lesions. Our population density is around 12% of that of Italy therefore to travel up to 400 km to a centre with surgical backup with or without an infarction is neither medically feasible nor possible in our medical system.

We feel that the data on mortality after emergency coronary artery bypass grafting (CABG) are clearly stated in the paper. The proportion of patients with a myocardial infarction who underwent emergency CABG did not differ between the two groups.

Although the tables depict non-adjusted mortality, the text and fig 1 show the adjusted outcome. Hospital type (on-site versus off-site) was not a predictor of mortality.

We believe that our work clearly represents the general clinical situation of all patients undergoing percutaneous coronary intervention in Sweden—with a completeness of >99.9% for the mortality data thanks to the

Swedish population registry. However, as already stated under limitations "Another possible shortcoming is the question of applicability of the Swedish data to other countries". We mentioned that in Sweden no very low-volume centres (<30 procedures/year) exist. Almost all percutaneous coronary intervention work is done on an ad hoc basis. Referral to other centres is the exception. Therefore, the data may not be applicable to Italy.

Jörg Carlsson, Stefan N James, Elisabeth Ståhle, Sebastian Höfer, Bo Lagerqvist Länssjukhuset, Kalmar, Sweden

Correspondence to: Dr Jörg Carlsson, Lasarettsvägen Kalmar S-39185, Sweden; jorgc@ltkalmar.se

# **CORRECTIONS**

doi: 10.1136/hrt.2006.091561corr1

Reyes RM, Peinado RP, Ruiz JMO. Asynchronic and hypokinetic movement of the left ventricular posterior wall due to preexcitation syndrome. *Heart* 2007;93:651.

An author of this Image in Cardiology, RM Reyes, should be listed as R Martín-Reyes.

doi: 10.1136/hrt.2006.107763corr1

Huang P-H, Chen Y-H, Chen Y-L, Wu T-C, Chen J-W, Lin S-J. Vascular endothelial function and circulating endothelial progenitor cells in patients with cardiac syndrome *X. Heart* 2007;**93**:1064–70.

The affiliations for the authors of this paper are as follows:

Po-Hsun Huang, Tao-Cheng Wu, Jaw-Wen Chen, Shing-Jong Lin, Institute of Clinical Medicine and Cardiovascular Reseach Center, National Yang-Ming University, Taipei, Taiwan

**Yung-Hsiang Chen,** Graduate Institute of Integrated Medicine, College of Chinese Medicine, China Medical University, Taichung, Taiwan

**Yuh-Lien Chen,** Department of Anatomy and Cell Biology, College of Medicine, National Taiwan University, Taipei, Taiwan

## Featured correspondence

We select the letters for the Featured Correspondence pages from those posted on Heart Online. Please visit the website to read all the correspondence by clicking on Read eLetters on the home page. If you wish to submit a letter follow the Submit a response links in the abstract and full text views of each article.